

DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY AFFAIRS (PERA)
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208 Miami, Florida 33175-2474

T (786) 315-2590 F (786) 315-2599 www.miamidade.gov/building

### **NOTICE OF ACCEPTANCE (NOA)**

Armor Screen Corp. 1881 Old Okeechobee Road West Palm Beach, FL 33409

### SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA-Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

**DESCRIPTION:** "Armor Screen Series 63" Flexible Wind Abatement System

**APPROVAL DOCUMENT:** Drawing No. 01-2010, titled "Armor Screen Series 63 Hurricane Protection", sheets 1 through 11 of 11, prepared by Gary D. Foreman, P.E., dated October 01, 2010, signed and sealed by Gary D. Foreman, on February 16 & 17, 2012, bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

**LABELING:** Each panel shall bear a permanent label with the manufacturer's name or logo, City, State, the following statement: "Miami-Dade County Product Control Approved", and NOA number, per TAS-201, TAS-202, and TAS-203, unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA # 10-1104.03 and consists of this page 1, evidence submitted pages E-1 & E-2 as well as approval document mentioned above.

The submitted documentation was reviewed by Helmy A. Makar, P.E., M.S.

MIAMI-DADE COUNTY
APPROVED

NOA No. 12-0223.13
Expiration Date: 01/26/2017
Approval Date: 03/22/2012
Page 1

### NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

### 1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 10-1104,03

### A. DRAWINGS

1. Drawing No. 01-2010, titled "Armor Screen Series 63 Hurricane Protection", sheets 1 through 11 of 11, prepared by Gary D. Foreman, P.E., dated October 01, 2010, signed and sealed by Gary D. Foreman, on January 09, 2012.

### B. TESTS

- 1. Test report on Large Missile Impact Test, Cyclic Wind Pressure Test and Uniform Static Air Pressure Test of Armor Screen Flexible Hurricane Wind Abatement System, prepared by Fenestration Testing Laboratory, Inc., Report No. 5889, dated August 26, 2009, signed and sealed by Julio E. Gonzalez, P.E.
- 2. Test report on Large Missile Impact Test, Cyclic Wind Pressure Test and Uniform Static Air Pressure Test of Armor Screen Flexible Hurricane Wind Abatement System, prepared by Fenestration Testing Laboratory, Inc., Report No. 5533, dated February 08, 2008, signed and sealed by Marlin Brinson, P.E.
- 3. Test report on Large Missile Impact Test, Cyclic Wind Pressure Test and Uniform Static Air Pressure Test of Armor Screen Flexible Hurricane Wind Abatement System, prepared by Fenestration Testing Laboratory, Inc., Report No. 5279, dated August 26, 2009, signed and sealed by Julio E. Gonzalez, P.E.

### C. CALCULATIONS

1. Comparative Analysis and Anchor calculations dated October 20, 2010, 66 pages, prepared by Gary D. Foreman, P.E., signed and sealed by Gary d. Foreman, P.E.

### D. OUALITY ASSURANCE

1. By Miami-Dade County Department of Permitting, Environment, and Regulatory Affairs (PERA).

### E. MATERIAL CERTIFICATIONS

1. Fabric specifications.

### 2. NEW EVIDENCE SUBMITTED

### A. DRAWINGS

1. Drawing No. 01-2010, titled "Armor Screen Series 63 Hurricane Protection", sheets 1 through 11 of 11, prepared by Gary D. Foreman, P.E., dated October 01, 2010, signed and sealed by Gary D. Foreman, on February 16 & 17, 2012.

Heimy A. Makar, P.E., M.S.

PERA-Product Control Unit Supervisor NOA No. 12-0223,13

Expiration Date: 01/26/2017 Approval Date: 03/22/2012

### Armor Screen Corp.

### NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

- B. TESTS
  - 1. None.
- C. CALCULATIONS
  - 1. None.
- D. QUALITY ASSURANCE
  - 1. By Miami-Dade County Department of Permitting, Environment, and Regulatory Affairs (PERA).
- E. MATERIAL CERTIFICATIONS
  - 1. None.
- F. OTHERS
  - 1. Florida Building Code, 2010 Edition, Compliance Statement Letter by GD Foreman PE, SE, AIA, dated February 16, 2012, signed and sealed by Gary D Foreman, P.E.

Helmy A. Makar, P.E., M.S.

PERA-Product Control Unit Supervisor NOA No. 12-0223.13

Expiration Date: 01/26/2017 Approval Date: 03/22/2012

### ARMOR SCREEN SERIES 63 HURRICANE PROTECTION

### **GENERAL NOTES:**

- This Wind Abatement / Impact Hurricane Protection System is designed and tested to comply with the High Velocity Hurricane Zone (HVHZ) of the Florida Building Code, 2007 and 2010 Editions.
- For use with 2010 FBC, the design pressures as determined from Section 1620 and ASCE 7-10 must be multiplied by 0.6.
- Testing meets the current Florida Building Code; TAS 201; TAS 202; TAS 203 and fulfills its requirement for opening protection.
- The unbreached envelope criterion is met when the system encloses the protected opening all around.
- The open areas in the Armor Screen Fabric are small enough that the surface tension of water causes the barrier screen to become solid in the presence of rain, and in actual hurricane conditions has been shown to prevent damaging voluminous water intrusion, even from torrential rains.
- Product Marking: A permanent label shall be affixed to the screen barrier with the following statement: "Armor Screen Corporation, Current Address, "Miami-Dade County Product Control Approved", Patented and Patents Pending, US Patent No. 6176050".

### **PRODUCT DATA:**

Geosynthetic hurricane screen: The hurricane screen shall be produced from a
polypropylene, woven geotextile fabric with filaments woven such that the filaments retain
dimensional stability relative to each other.

The woven geotextile fabric shall have the following minimum average roll values:

Grab Textile Strength	(ASTM D4632)	425 x 325 LBS
Puncture Strength	(ASTM D4833)	130 LBS
Mullen Burst	(ASTM D3786)	675 PSI
Trapezoidal Tear	(ASTM D4533)	150 x 125 LBS
Wide Width Tensile Strength	(ASTM D4595)	225 x 205 LBS/IN
Thickness	(ASTM D5199)	20 MIL.
Wide Width Elongation	(ASTM D4595)	22 x 21%
Apparent Opening Size	,	30 US STD Sieve
Percentage of Open Area		5%

### **LIMITATIONS OF USE:**

Maximum	Span	144"

Maximum Non-Span Unlimited, Utilizing side overlapping details, page 4

Maximum Design Pressure +60 /-63 PSF

 Span (anchor span) equals the distance between the primary rows of anchors on opposing sides of the screen and when calculated with negative wind pressure, determines fastener size and spacing. "Opening Span" is equal to the opening size of the protected opening and when calculated with the positive wind pressure, determines the deflection for HVHZ applications. Refer to page 11 for Deflection Table.

All Geosynthetic Hurricane Screen assembly details depicted within these drawings are typical for the installation of this wind / rain abatement and impact system only. All other building components shown herein are depicted as existing or samples and not constructed by the screen company.

### INSTALLATION NOTES:

- Deflection is the minimum glass separation measured at mid span of the screen and subject to interpolation between listed spans (see tables on page 11). Separation offset may be achieved alone or by any combination thereof, Natural Deflection, Angled Style Screens, Storm Bars and Pneumatic Devices.
- Screen may be mounted with opposing primary anchored perimeters (span) in vertical, horizontal, or any alignment appropriate to the structure being protected.
- If the screen does not return to the structure it should extend past protected opening by distance equal to or greater than 1  $\frac{1}{2}$  times the offset. For trapped openings the screen should extend complete to fill the opening.
- The screens may be installed at any height on the structure as long as the design pressure rating for the screens is not exceeded.
- Anchors on the non-primary perimeter side (span side) of the screen are optional (e.g. to limit potential sag in the screen or reduce movement on the free side or other site specific reasons).
- The thickness of typical facing materials i.e. stucco, siding, stone, brick, pavers, etc. are not to be considered part of the anchor embedment. Longer fasteners should be used to allow for facing materials.
- · Anchor embedment into masonry shall be into the face shell, not mortar joints.
- All fully embedded anchors may be flush with the finished facing provided they have the correct embedment into the structure behind the finish material.
- Anchor installations should follow the manufacturer's recommended methods.
- Hex Nuts, Flange Nuts, Cap Nuts, Wing Nuts, etc. (¾" o.d. minimum), are acceptable when used with Hanger Bolt or Male Studs penetrating the fabric only.
- For attachment into female anchors, sidewalk bolts, washered head bolts or bolts with a standard washer are required.
- A caulk or sealant should be used with all wood penetrating anchors.
- All fasteners shall be corrosion resistant as specified in the IRC and IBC or stainless steel
- Refer to pages 9 and 10 for approved anchors and anchor spacing.
- Refer to page 11 for deflection and storm bar tables.

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ARMOR SCREEN
SERIES 63
HURRICANE PROTECTION

ARMOR SCREEN CORP. 1881 Old Okeechobee Road West Palm Beach, FL 33409 (561) 841-8890 www.armorscreen.com

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DRAWING NO. 01-2010

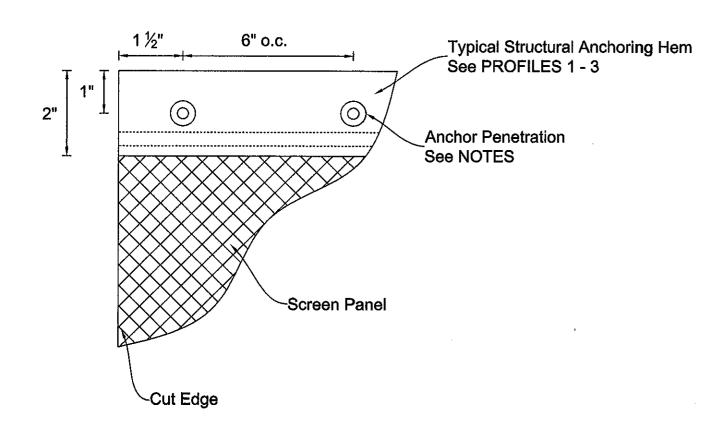
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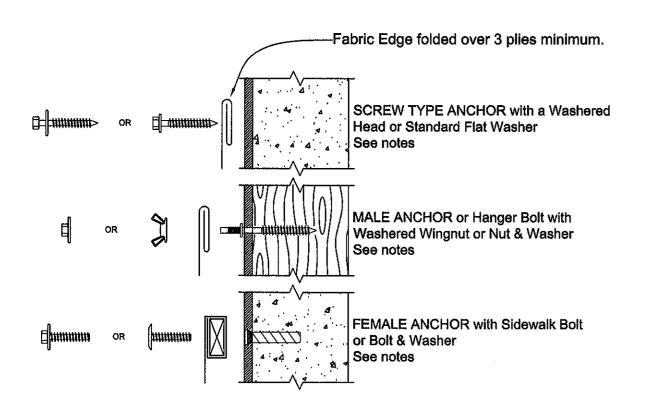
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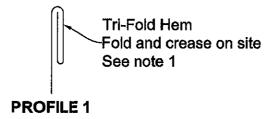


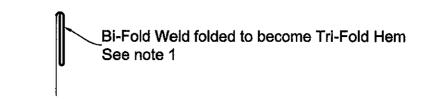


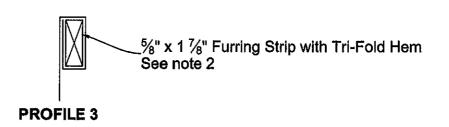
### SAMPLE ANCHORING FOR PROFILES 1 - 3

APPLIES TO VERTICAL WALL OR HORIZONTAL MOUNTING APPLICATIONS

### STRUCTURAL ANCHORING HEMS







### NOTES:

**PROFILE 2** 

- For Direct Screen Attachment, PROFILES 1 and 2, create a hem (see details on this page) by folding and creasing the screen, followed by creating the anchor penetration holes using a Scratch All, nail, or pointed object.
- 2. Pre-drill the furring strip 6" o.c. per anchor size or use a self-drilling screw (see pages 9 and 10). Secure the screen to the furring strip with staples to ensure positive attachment and eliminate the screen from unrolling.
- 3. Refer to pages 9 and 10 for anchor selection.

### **SCREEN PANEL & HEM DETAILS**

Engineering Review By:

Gary D-Foreman PE
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ARMOR SCREEN SERIES 63 HURRICANE PROTECTION

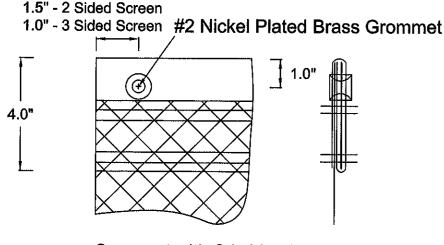
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**DRAWING NO. 01-2010** 

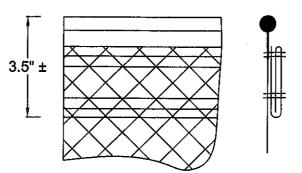
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Grommet with Stitching Detail Stitching Detail

- Support Edge, Trifold Seam around 4" Polypro webbing
- Sewing includes 2 rows, Double Lock Stitch, of Anefil Nylon T135 bonded thread or equal.
- Grommeted through seam.

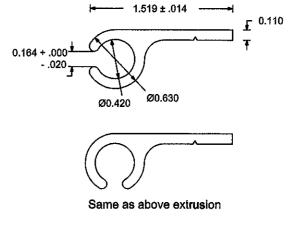


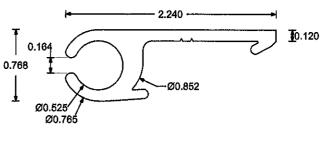
Welded Hemcord with Stitching Detail Stitching Detail

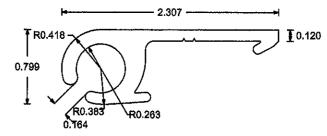
Alloy: 6063-T6

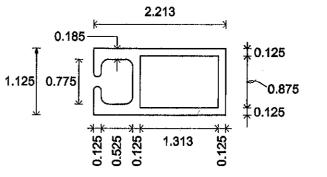
Aluminum

- Hemcord Dia.: 5/16"
- Sewing includes 2 rows, Double Lock Stitch, of Anefil Nylon T135 Bonded Thread or equal.
- Reinforced welded hemcord includes a 2" trifold Polypro Seam sewn over the weld.









C-Channel Alloy: 6063-T6 Aluminum

NOTE: Heavier alternate extrusion may be used.

# Anchor Spacing Set Screw Keyhole Slot in Keyhole Slot in C-Channel C-Channel

Alloy: 6063-T6

Aluminum

### NOTES:

Continuous

C-Channel

1. The length of the segmented C-Channel is governed by the strength of the fabric to C-Channel connection, not the hardware attachment to the C-Channel.

Segmented C-Channel

- 2. When a Keyhole Slot or washer is used on continuous C-Channel, a set screw through the channel and into the substrate is required to lock in place.
- 3. Refer to pages 9 and 10 for anchor selection.
- 4. A 1/4" TEK Screw may be used to secure the C-Channel end to limit screen movement.

### GROMMET / HEMCORD / C-CHANNEL

	Engineering Review By:	
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•	Gary D Foreman PE	l
	FL PE 57343	Γ

### ARMOR SCREEN SERIES 63 HURRICANE PROTECTION

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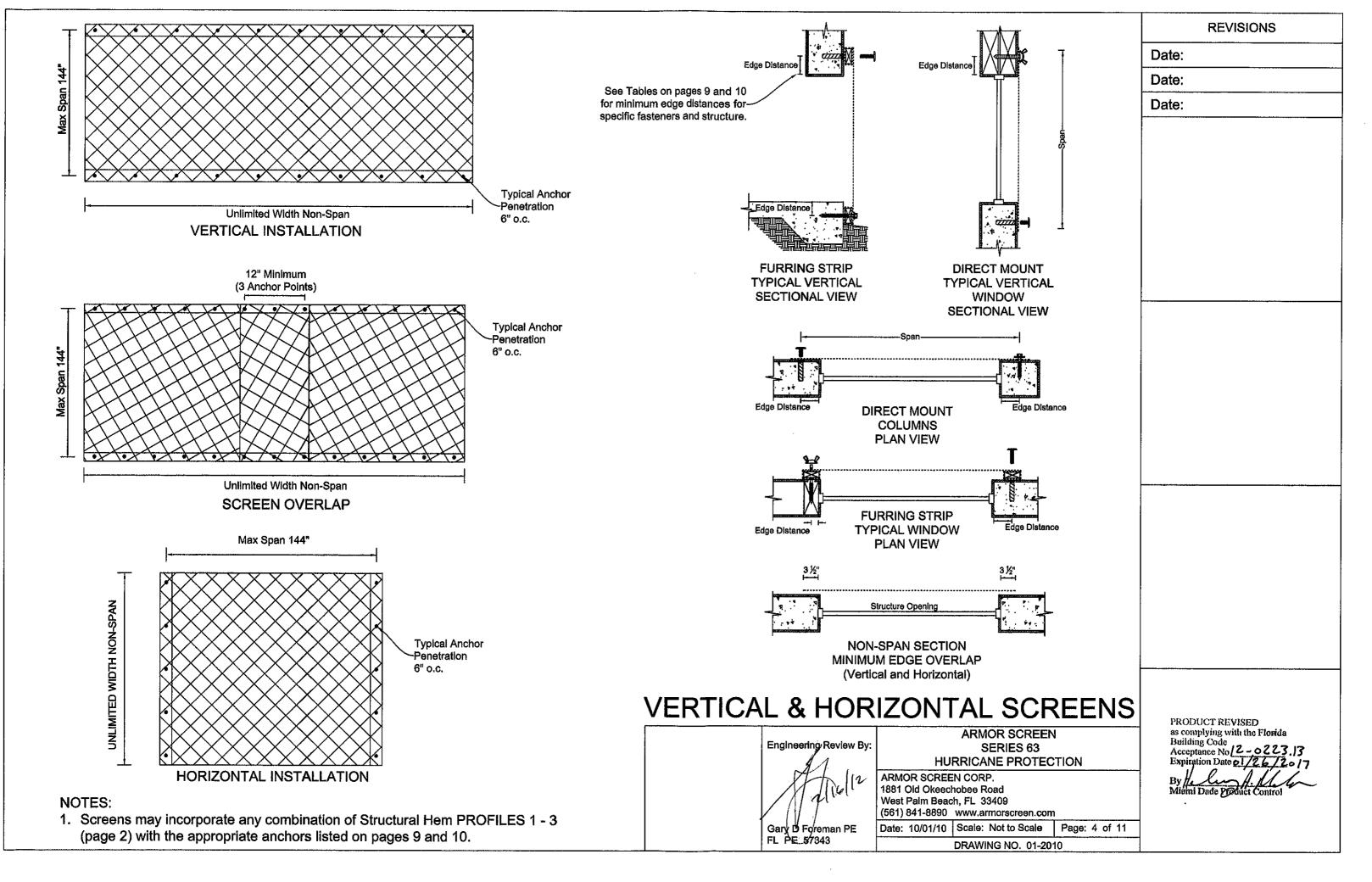
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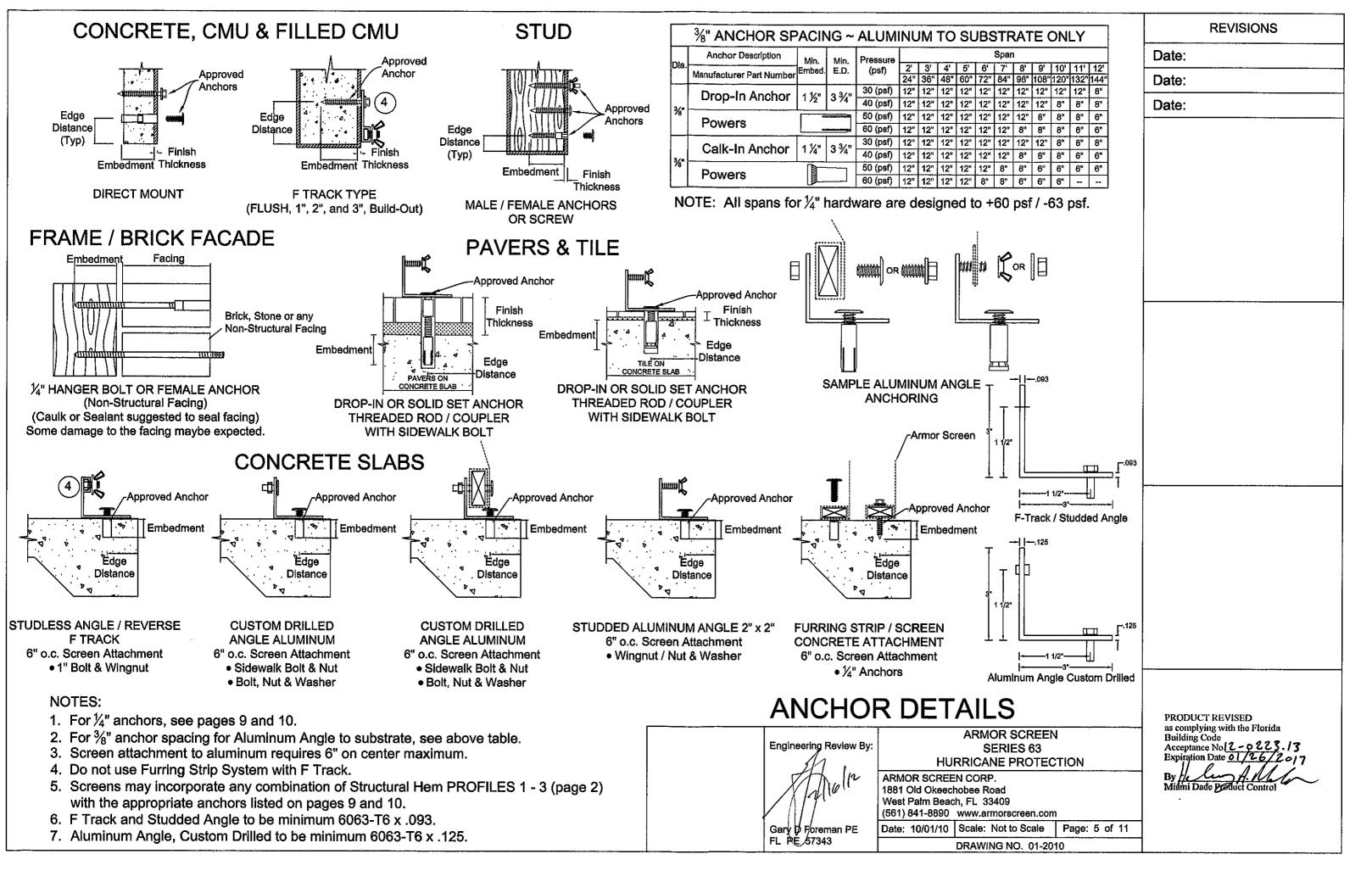
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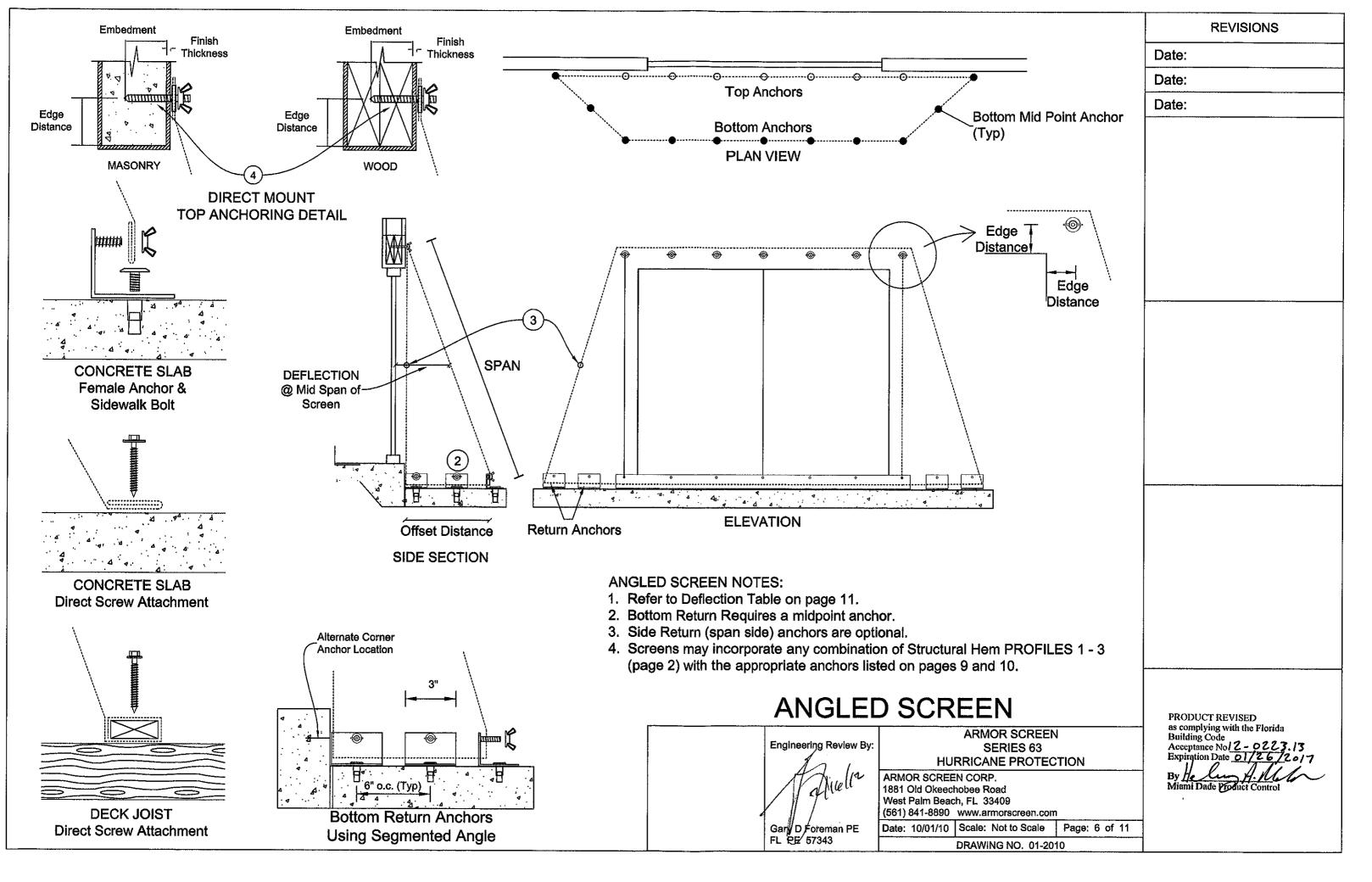
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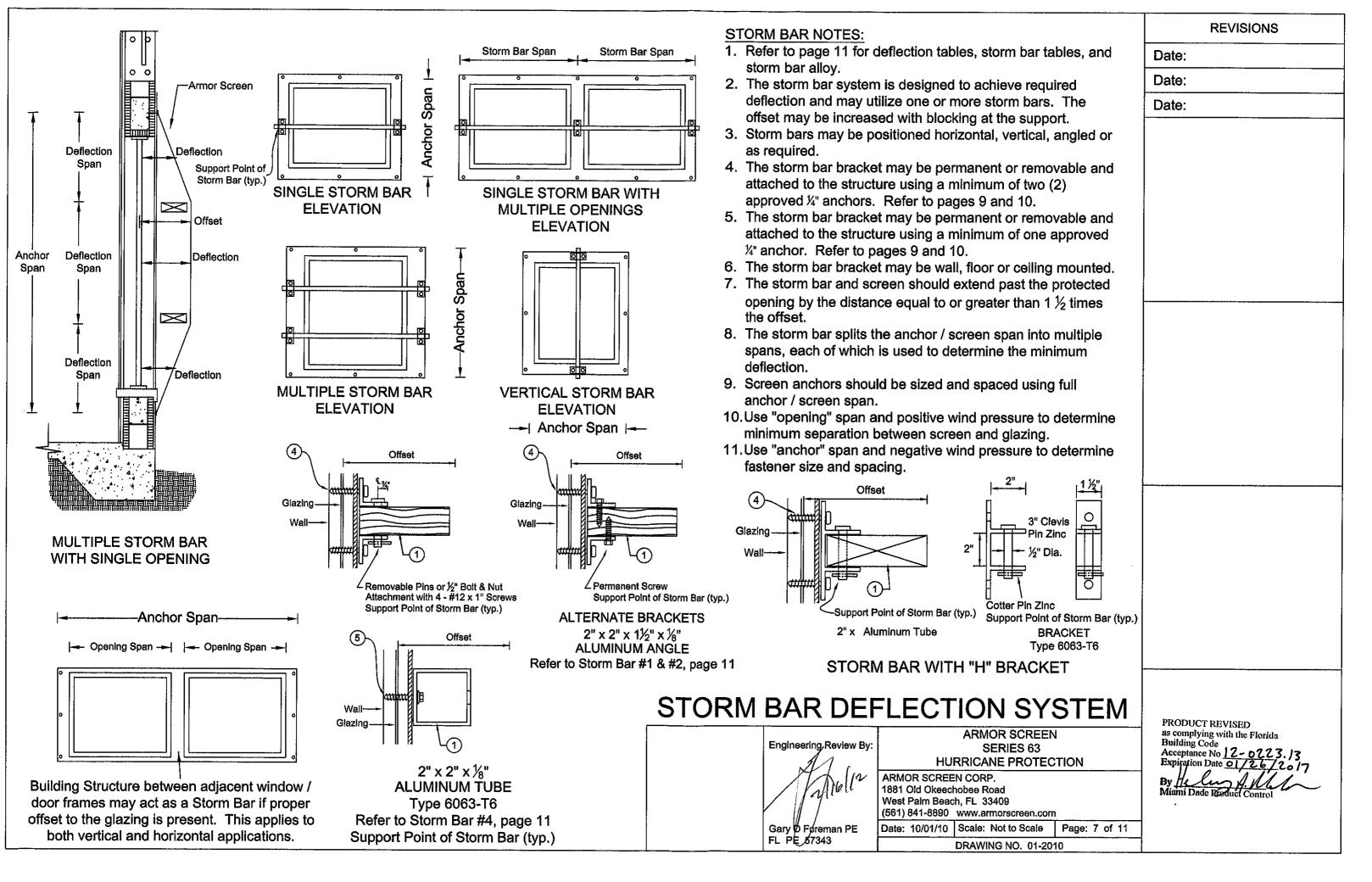
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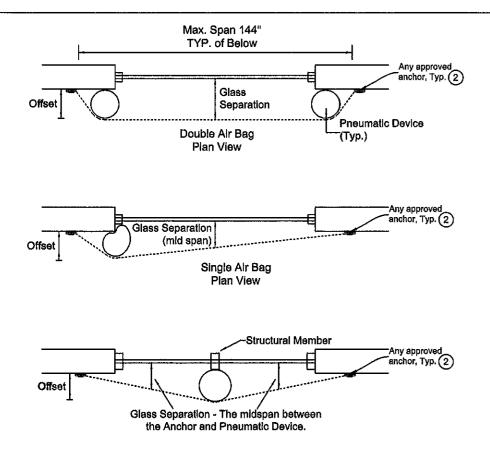
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### PNEUMATIC DEVICE (PD) SPECIFICATIONS:

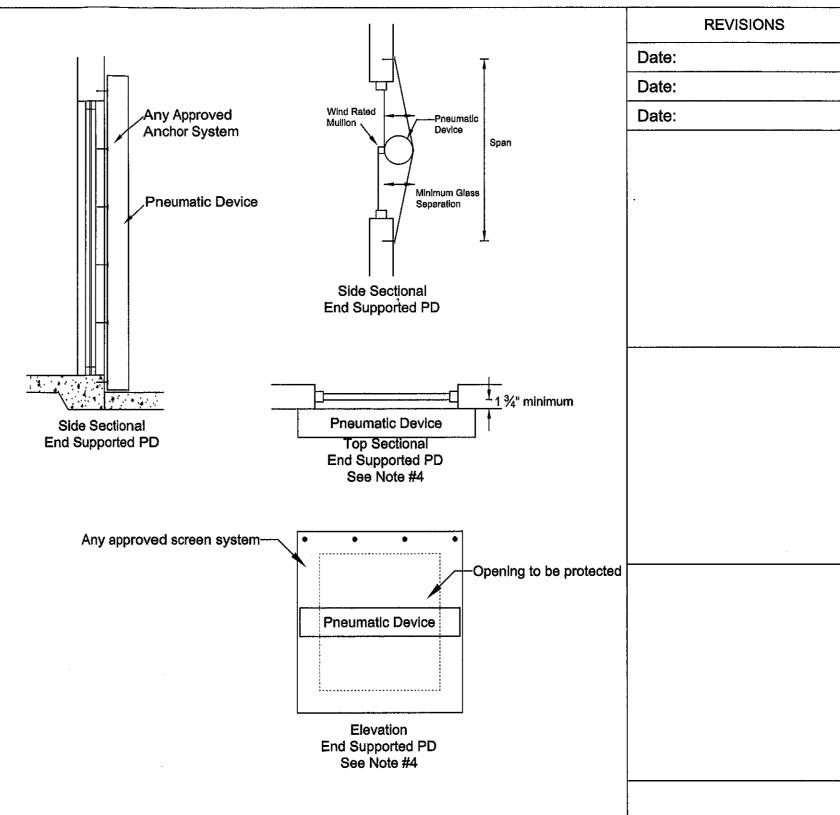
- 1. Pneumatic Device consists of two parts, a refillable polymer air bladder, diameter as appropriate to achieve glass separation, capable of holding air without perceptible leakage, and a tough fabric cover for structural integrity and durability.
- 2. May be inflated by any residential or commercial vacuum cleaner, or air pump intended for air mattresses or equivalent devices.
- 3. Upon removal, the Pneumatic Device should be deflated and stored with screen barrier.

### NOTES: PNEUMATIC DEVICE (PD) DEFLECTION SYSTEM

1. Refer to the Deflection Table on page 11 to determine PD diameter.

STORE FRONT OR CURTAIN WALL APPLICATION
Plan View

- 2. Refer to pages 9 and 10 for approved anchors.
- 3. The PD not supported directly on glazing may rest on a wind rated window mullion.
- 4. The pneumatic device may be attached to barrier and may rest on but not attached to the structure.
- 5. Inflation of the device requires a minimum pressure of 2.0 psi.
- 6. One or more devices may be used to achieve required HVHZ separation.
- 7. This system may be positioned horizontally, vertically, or as required.
- 8. The pneumatic device may be permanently attached to the screen or not.
- 9. The sleeve should not be attached to the building structure.
- 10. The pneumatic device should be positioned to provide adequate glass separation between the screen / barrier and surface being protected.



### PNEUMATIC DEFLECTION SYSTEM

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SERIES 63
HURRICANE PROTECTION

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	3000 PSI CONCRETE						
Dia.	Anchor Description  Manufacturer Part Number	Mln. Embed.	Mln. E.D.	Maximum Span (inches)	Anchor Spacing		
	Tapcon	1 ½"	3"	4440	011		
14"	Elco or ITW	********		144"	6"		
1/4"	Maxi-Set Tapcon	1 ½"	2 ½"	144"	6"		
74"	ITW 🗐 📶			144	O		
14"	Panelmate (Male or Female)	1 3/4"	2 ½"	144"	6"		
74	Elco	≻ EII¤	***************************************	144"	0		
1⁄4"	Panelmate Inserts	1 %"	3"	144"	6"		
/4	Elco	777	Ž)	144			
14"	Tapcon SG	1 3/4"	2 ½"	144"	6"		
/4	ITW (¼" × 2 ¼") □■■		<b>''''''</b>	177	0		
1/4"	Sammy's SSC	2 1/4"	2 ½"	144"	6"		
/4	ITW ==	nth		177	0		
1⁄4"	Solid Set Anchor	7⁄8"	3"	132"	6"		
/4	All Points			102			
14"	Calk-In Anchor	7/8"	3"	132"	6"		
74	Powers		<del></del>	102			
14"	Drop-In Anchor	1"	3 "	144"	6"		
	Powers			144"			

	SOLID GROUTED CMU						
Dla.	Anchor Description	Min.	Min.	Maximum Span	Anchor Spacing		
	Manufacturer Part Number	Embed.	E.D.	(inches)	Spacing		
1/4"	Spax Screw	1½"	2 ½"	144"	6"		
/4	Spax #			1-1-1			
14"	Tapcon	1½"	3"	144"	6"		
74	Elco or ITW	<b>!!!!!!!&gt;</b>		17-7			
1/4"	Maxi-Set Tapcon	1 ½"	2 ½"	144"	6"		
<i>y</i> <sub>4</sub> "	ITW ###	<b>                                     </b>		144	0		
1/0	Panelmate (Male or Female)	1 3/4"	2 ½"	144"	6"		
14"	Elco — — — — — — — — — — — — — — — — — — —			144*	0		
1/0	Panelmate Inserts	1 1 1 1 1 1 1 1	3"	108"	6"		
14"	Elco	777	J	106	б		
140	Tapcon SG	1 3/4"	2 ½"	4441	CII		
14"	ITW (½" x 2 ½")		1111111>	144"   6"			
44	Sammy's SSC	21/4"	2 1/2"	4.4.411	0"		
14"	ITW	· · · · · · · · · · · · · · · · · · ·		144"	6"		
445	Solid Set Anchor	7∕8"	3"	001	CII.		
14"	All Points			96"	6"		
1/11	Calk-In Anchor	7∕8"	3"	100"	6"		
14"	Powers			108"	U		
17::	Drop-In Anchor	1"	3 "	420"	e"		
14"	Powers			132"	6"		

CONCRETE BLOCK (CMU)					
Dia.	Anchor Description  Manufacturer Part Number	Min. Embed.	Min. E.D.	Maximum Span (inches)	Anchor Spacing
	Spax Screw	11/4"	2½"		
14"	Spax d	i <b>:</b>		72"	6"
1/3	Tapcon	11/4"	2½"	70"	6"
14"	Elco or ITW	·		72"	D
14"	Maxi-Set Tapcon	1"	4"	36"	6"
/4"	ITW []-nm	<b>!!!!!!!&gt;</b>		36"	0
14"	Panelmate (Male or Female) 1 1/4"   3 1/2"		120"	6"	
/4	Elco ————————————————————————————————————			0	
14"	Panelmate Inserts	1 1/4"	3½"	120"	6"
/4	Elco	777	Ž	120	0
14"	Tapcon SG	1 1/4"	2½"	72"	6"
/4	ITW <del>□</del>			12	
14"	Sammy's SSC	1 1/4"	2½"	72"	6"
/4	ITW			,,_	
1/2"	Solid Set Anchor	½"	3"	96"	6"
	All Points		1		•
14"	Calk-In Anchor	7∕8"	3"	84"	6"
<u></u>	Powers			<u> </u>	<u> </u>

	REVISIONS	
Date:		
Date:		
Date:		
**************************************		

### NOTES:

- 1. Maximum spans designed to +60 psf / -63 psf.
- 2. Provide longer fasteners, if required, to allow for thickness of non-structural finishes such as stucco, plaster, brick, stone, siding, etc.
- 3. All anchor holes to be clean and dust free before inserting intended anchor.
- 4. All anchors to be as specified.
- 5. Edge distances and embedments are minimums.

Engineering	Review	Ву:
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ARMOR SCREEN CORP. 1881 Old Okeechobee Road

West Palm Beach, FL 33409

Gar/ D Foreman PE FL PE 57343

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**DRAWING NO. 01-2010** 

ARMOR SCREEN

**SERIES 63** HURRICANE PROTECTION

PRODUCT REVISED as complying with the Florida Building Code

	WOOD SYP #2 (G = 0.55)						
Dia.	Anchor Description  Manufacturer Part Number	Min. Embed.	Min. E.D.	Maximum Span (Inches)	Anchor Spacing		
	Spax Self Drilling Screw	2"	3⁄4"	4 4 4 0	<b></b>		
14"	Spax 🗐	*******		144"	6"		
1/4"	Lag Screw	2"	3/4"	144"	6"		
74	<u> </u>			144	O		
1/4"	Tapcon or #14 Wood SC	2"	3/4"	1/1/1"	e"		
74"	Elco or ITW	····		144" 6"			
1/4"	Panelmate (Male or Female)	2"	3/4"	144"	6"		
74"	Elco -	144	0				
1/4"	Panelmate Inserts	1 %"	1¼"	144"	6"		
74"	Elco	777	Ì	7 144"   6"			
1/4"	Tapcon SG	2"	3/4"	144"	6"		
74"	ITW		144	b			
1/4"	Sammy's SSC	2"	3/4"	144"	6"		
74"	ITW		*******	!44	O		
1/11	Hanger Bolt	2"	3/4"	144"	6"		
1/4"				144	U		

### NOTES:

- 1. Maximum spans designed to +60 psf / -63 psf.
- 2. Caulk or sealant is recommended for all penetrations into a wood substrate.
- 3. Provide longer fasteners, if required, to allow for thickness of non-structural finishes such as stucco, plaster, brick, stone, siding, etc.
- 4. All anchors to be as specified.
- 5. Design as per NDS 2005.
- 6. Douglas Fir Larch is an acceptable alternate.
- 7. Edge distances and embedments are minimums.

L	STEEL AND ALUMINUM					
	Dia.	Anchor Description	Min. Embed.	Min. E.D.	Maximum Span	Anchor Spacing
		Manufacturer Part Number	EIIIDOU.	E.D.	(inches)	Spacing
sage Metal Studs	1/8	Self Drilling Screws	note 2	1/2"	72"	6"
20 Gage Metal Studs	14"	¼"-14 TEKS ∰	<b>⇒</b>		12	0
18 Gage Metal Studs	1/11	Self Drilling Screws	note 2	1/2"	96"	6"
18 Gag Sh	14"	1/4"-14 TEKS	<b>&gt;</b>		90	0
Steel	1/11	Self Drilling Screws	note 2	1/2"	144"	6"
% Steel	14"	¼"-14 TEKS ₫	<b>&gt;</b>			0
A) Steel	1/0	Self Drilling Screws	note 2	1/2"	144"	6"
12 GA) Steel (¥	1/4"	1/4"-14 TEKS		144		
%" and ½" Steel	1/11	Rivet Nuts		3/4"	144"	6"
% and %.		1⁄4" - 20 Atlas			144	6
16" Aluminum 6063-T6 2√2	Self Drilling Screws	note 2	1/2"	40011	6"	
	<b>/</b> 4"	½"-14 TEKS ₫•••••	<b>&gt;</b>		120"	ð
minum 3-T6	1/11	Rivet Nuts		3/4"	144"	6"
%" Atuminum 6063-T6	14"	1/4" - 20 Atlas	)		144	0

### NOTES:

- 1. Maximum spans designed to +60 psf / -63 psf.
- 2. Provide longer fasteners, if required, to allow for thickness of non-structural finishes such as stucco, plaster, brick, stone, siding, etc.
- 3. Screws shall extend past metal at least  $\frac{1}{4}$ ".
- 4. All anchors to be as specified.
- 5. Edge distances and embedments are minimums.

	Engineering Review By:	ARMOR SCREEN SERIES 63 HURRICANE PROTECTION					
i	1/1/10/12	ARMOR SCREE 1881 Old Okeech West Palm Beacl (561) 841-8890	obee Road	1			
!	Gary D Foreman PE	Date: 10/01/10	Scale: Not to Scale	Page: 10 of 11			
	FL PE 57343		DRAWING NO. 01-20	10			

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	STORM	BAR	TAE	SLE							
	Storm Bar Span / Length	3' 4' 5' 6' 8' 10' 12'									
	Max. PSF	Per Deflection Table									
	Deflection		Per Deflection Table								
1	Wood 2" x 6"	х	х	х	х						
2	Wood 2" x 8"	Х	х	Х	х	х					
3	Alum. Tube 1" x 2" x ½" 6063-T6	x									
4	Alum. Tube 2" x 2" x ½" 6063-T6	х	х	х							
5	Alum. Tube 2" x 4" x ½" 6061-T6	x	x	х							
6	Alum. Tube 2" x 4" x ½" 6061-T6	х	х	х	х						
7	Alum. Tube 2" x 6" x ½" 6063-⊤6	х	х	х	х	х					
8	Alum. Tube 2" x 6" x ¼" 6061-T6	х	х	х	х	х	х	х			
9	Alum. Tube 2" x 8" x ½" 6061-T6	х	х	х	х	х	х	х	х		

### NOTES:

- 1. Wood Storm Bar #1 and #2 requires alternate storm bar bracket, see detail on pages 7.
- 2. Wood Storm Bar #1 and #2 to be #2 SYP (Southern Yellow Pine) or Douglas Fir-Larch.
- 3. Storm Bars #3, #4, #5 and #6, screen width supported by storm bars shall be equal to span or 6' maximum. For screens wider than maximum width use multiple storm bars.

Span	Span	Deflection in inches						
In feet	in inches	30 psf	40 psf	50 psf	60 psf			
2 ft.	24	3.0	3.1	3.3	3.5			
3 ft.	36	4.0	4.2	4.4	4.8			
4 ft.	48	4.9	5.3	5.5	6.0			
5 ft.	60	5.9	6.3	6.7	7.3			
6 ft.	72	7.2	7.8	8.1	9.0			
7 ft.	84	8.2	8.8	9.3	10.2			
8 ft.	96	9.2	9.9	10.4	11.5			
9 ft.	108	10.2	11.0	11.5	12.8			
10 ft.	120	11.2	12.0	12.7	14.0			
11 ft.	132	12.2	13.1	13.8	15.3			
12 ft.	144	13.1	14.2	14.7	16.5			

### NOTES:

- 1. Deflection is the minimum glass separation measured at MID SPAN of the screen and subject to interpolation between listed spans.
- One inch (1") has been added to actual minimum separation for safety factor.

	SC	REE	N RE	ACT	ONS	FOR	PRE	SSU	RE AI	ND SI	PAN	
							Span				······································	
Load (psf)		2'	3'	4'	5'	6'	7'	8'	9'	10'	11'	12'
(þs	,,	24"	36"	48"	60"	72"	84"	96"	108"	120"	132"	144"
30	Rh	30	45	60	75	90	105	120	135	150	165	180
	Rv	94	141	188	234	281	328	375	422	469	516	563
40	Rh	40	60	80	100	120	140	160	180	200	220	240
40	Rv	112	169	225	281	337	393	449	506	562	618	674
50	Rh	50	75	100	125	150	175	200	225	250	275	300
30	R۷	129	193	258	322	387	451	515	580	644	709	773
60	Rh	60	90	120	150_	180	210	240	270	300	330	360
	R۷	143	214	286	357	429	500	571	643	714	786	857

## Span Pressure PSF

### NOTES:

- 1. Reaction Rh can be positive (towards structure) or negative (away from structure).
- 2. Rv is always tension as shown.

AN.	EMBEDDED ANCHOR DIAMETER						
	14"	. 3%"					
Α	1/2"	11/16"					
В	5/16"	7⁄ <sub>16</sub> "					

- A Internal Thread Length
- **B** Minimum Thread Engagement

### 

### NOTES:

- 1. Table applies to any threaded connection.
- 2. Refer to anchor spacing tables, pages 9 and 10, for anchor embedment.
- 3. Edge distances and embedments are minimums.

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